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The Next Gate

By JACQUES STEINBERG

As students contemplate graduate school, their frame of reference is likely the only admissions process most have ever known: the jagged maze they followed to college as high school seniors.

There are some fundamental differences between the two processes — the weeding out of grad school applicants is largely the responsibility of faculty, for example, not a centralized admissions office; and there is no Common Application (except for some professional schools). But students should take comfort in the many parallels with college admissions.

In their deliberations, grad-school gatekeepers rely on some of the same raw materials as their peers at undergraduate institutions, including personal statements and letters of recommendation. They also seem to appreciate — here comes a flashback — evidence of a challenge overcome and even extracurricular activities.

“We need to understand your entire story: your background, your future aspirations,” said Lisa Giannangeli, director of M.B.A. admissions for the Stanford Graduate School of Business. “Your personal qualities and contributions — everything about you that makes you who you are — suggests how you see the world and what shaped the perspective you will bring to future classmates.”

To get a feel for the so-called holistic side of their admissions thinking, I spoke recently to Ms. Giannangeli and others involved in the process at well-regarded programs of law (Yale), English (University of California, Berkeley) and engineering (University of Texas, Austin). I also spoke to a counselor at Hamilton College who advises undergraduates on their graduate school aspirations. They shared insights into the basic elements of an application.

GRADES AND SCORES

While most programs require standardized tests — the G.R.E., the GMAT (for business) or the LSAT (law) — none of those interviewed here said they regarded any particular score, or grade-point average, as a hard cutoff.

That said, many law schools have designed an admissions algorithm. The schools assign numerical values to undergraduate G.P.A. and LSAT score, and perhaps other factors — say, enthusiasm of a letter of recommendation — to come up with what they call an index number. “Generally people below are presumptively denied, and above presumptively admitted,” says Asha Rangappa, associate dean of admissions of Yale Law School. “We make it a point to say we don’t have that at all.”

Though Ms. Rangappa says the distinctions she and her colleagues divine between candidates will be “somewhat subjective,” the end result suggests that test scores do matter at Yale: three of every four members of the class that just completed its first year at Yale Law scored at or above the 98th percentile on the LSAT.

While each admissions office has its nuances, G.P.A. can be more meaningful than a test score, particularly if in a course related to graduate study. At the University of Texas’s engineering school, G.R.E. “scores are not determinative in an admissions decision,” said the dean, Gregory L. Fenves. “They carry some weight, but it’s not significant.” He would be inclined to give more weight to G.P.A. — “that’s very important,” he said — specifically during the last two years of college in courses in one’s major, presumably engineering or other sciences.

“It’d be rare for us to admit a student with a G.P.A. of less than 3.5,” on a scale of 4, Dr. Fenves said.

STATEMENTS AND SAMPLERS

The admissions template for Ph.D. programs in the humanities calls for three major pieces of writing.

The statement of purpose is typically a two-page intellectual biography that might outline a potential path of research as well as underscore the applicant’s deep contemplation of chosen field and appreciation for the arduous task that awaits in the next few years. The required writing sample has more of the feel of a term paper (it could well be a 20-page paper written for a college class). Meanwhile, the personal statement should feel as comfortable as a thick blanket to those who recall their undergraduate applications.

“We are very interested in how students have grappled with challenges in their lives,” said Dorothy Hale, director of graduate studies for the department of English at Berkeley. “Obviously, graduate work is very independent. We want to know people can come up against obstacles and

figure out solutions to them." Dr. Hale said that a compelling personal story has in the past made up for a low G.R.E. score. "The thing to take away is, we do personalize it," she said.

So, too, at Stanford Business. Ms. Giannangeli said her team might sift through personal statements for evidence of engagement and leadership. "Where have you shown initiative?" she said. "Where have you taken on an active role in a project, a team, an organization, a group and made a difference?"

Jeannine Murtaugh, who for more than two decades has counseled students at Hamilton College's career center, advises undergraduates interested in a Master of Business Administration to consider spending at least two years working full time before applying — the better to get seasoning and sharpen one's focus.

Similarly, Dr. Fenves expressed a desire to see more than just a "student" emerge from the application. "We're looking at the whole person," he said. "We don't want someone who is just good in the classroom, and that's it."

One nascent trend, he added, is entrepreneurial experience. "I personally would weigh that heavily."

RECOMMENDATIONS

Reference letters from professors — or, for older applicants, supervisors at work — are of great significance to those considering applications. And as at the undergraduate level, applicants should find someone who really knows them, perhaps as a result of involvement in undergraduate research (also helpful in developing those research papers to submit with the application).

The faculty members who make the admissions choices are looking at reference letters for signs of "intellectual vitality," as Ms. Giannangeli put it — something, no matter the discipline, that they might find relatable.

"Yes, it's your grades, your test scores," she said. "But as important as the numbers is your attitude toward learning, that you're intellectually curious, that you like to learn new things."

The Master's as the New Bachelor's

By LAURA PAPPANO

William Klein's story may sound familiar to his fellow graduates. After earning his bachelor's in history from the College at Brockport, he found himself living in his parents' Buffalo home, working the same $7.25-an-hour waiter job he had in high school.

It wasn't that there weren't other jobs out there. It's that they all seemed to want more education. Even tutoring at a for-profit learning center or leading tours at a historic site required a master's. "It's pretty apparent that with the degree I have right now, there are not too many jobs I would want to commit to," Mr. Klein says.

So this fall, he will sharpen his marketability at Rutgers' new master's program in Jewish studies (think teaching, museums and fund-raising in the Jewish community). Jewish studies may not be the first thing that comes to mind as being the road to career advancement, and Mr. Klein is not sure exactly where the degree will lead him (he'd like to work for the Central Intelligence Agency in the Middle East). But he is sure of this: he needs a master's. Browse professional job listings and it's "bachelor's required, master's preferred."

Call it credential inflation. Once derided as the consolation prize for failing to finish a Ph.D. or just a way to kill time waiting out economic downturns, the master's is now the fastest-growing degree. The number awarded, about 657,000 in 2009, has more than doubled since the 1980s, and the rate of increase has quickened substantially in the last couple of years, says Debra W. Stewart, president of the Council of Graduate Schools. Nearly 2 in 25 people age 25 and over have a master's, about the same proportion that had a bachelor's or higher in 1960.

"Several years ago it became very clear to us that master's education was moving very rapidly to become the entry degree in many professions," Dr. Stewart says. The sheen has come, in part, because the degrees are newly specific and utilitarian. These are not your general master's in policy or administration. Even the M.B.A., observed one business school dean, "is kind of too broad in the current environment." Now, you have the M.S. in supply chain management, and in managing mission-driven organizations. There's an M.S. in skeletal and dental bioarchaeology, and an M.A. in learning and thinking.

The degree of the moment is the professional science master's, or P.S.M., combining job-specific training with business skills. Where only a handful of programs existed a few years ago, there are now 239, with scores in development. Florida's university system, for example, plans 28 by 2013, clustered in areas integral to the state's economy, including simulation (yes, like Disney,

but applied to fields like medicine and defense). And there could be many more, says Patricia J. Bishop, vice provost and dean of graduate studies at the University of Central Florida. “Who knows when we’ll be done?”

While many new master’s are in so-called STEM areas — science, technology, engineering and math — humanities departments, once allergic to applied degrees, are recognizing that not everyone is ivory tower-bound and are drafting credentials for résumé boosting.

“There is a trend toward thinking about professionalizing degrees,” acknowledges Carol B. Lynch, director of professional master’s programs at the Council of Graduate Schools. “At some point you need to get out of the library and out into the real world. If you are not giving people the skills to do that, we are not doing our job.”

This, she says, has led to master’s in public history (for work at a historical society or museum), in art (for managing galleries) and in music (for choir directors or the business side of music). Language departments are tweaking master’s degrees so graduates, with a portfolio of cultural knowledge and language skills, can land jobs with multinational companies.

So what’s going on here? Have jobs, as Dr. Stewart puts it, “skilled up”? Or have we lost the ability to figure things out without a syllabus? Or perhaps all this amped-up degree-getting just represents job market “signaling” — the economist A. Michael Spence’s Nobel-worthy notion that degrees are less valuable for what you learn than for broadcasting your go-get-’em qualities.

“There is definitely some devaluing of the college degree going on,” says Eric A. Hanushek, an education economist at the Hoover Institution, and that gives the master’s extra signaling power. “We are going deeper into the pool of high school graduates for college attendance,” making a bachelor’s no longer an adequate screening measure of achievement for employers.

Colleges are turning out more graduates than the market can bear, and a master’s is essential for job seekers to stand out — that, or a diploma from an elite undergraduate college, says Richard K. Vedder, professor of economics at Ohio University and director of the Center for College Affordability and Productivity.

Not only are we developing “the overeducated American,” he says, but the cost is borne by the students getting those degrees. “The beneficiaries are the colleges and the employers,” he says. Employers get employees with more training (that they don’t pay for), and universities fill seats. In his own department, he says, a master’s in financial economics can be a “cash cow” because it draws on existing faculty (“we give them a little extra money to do an overload”) and they charge

higher tuition than for undergraduate work. “We have incentives to want to do this,” he says. He calls the proliferation of master’s degrees evidence of “credentialing gone amok.” He says, “In 20 years, you’ll need a Ph.D. to be a janitor.”

Among the new breed of master’s, there are indeed ample fields, including construction management and fire science and administration, where job experience used to count more than book learning. Internships built into many of these degrees look suspiciously like old-fashioned on-the-job training.

Walter Stroupe, a retired police first lieutenant and chairman of the department of criminal justice at West Virginia State University, acknowledges that no one needs to get the new master’s degree in law enforcement administration the school is offering beginning this fall. In fact, he concedes, you don’t even need a college degree in West Virginia to become a police officer, typically the first step to positions as sheriff and police chief.

Still, Dr. Stroupe says, there are tricky issues in police work that deserve deeper discussion. “As a law enforcement officer, you can get tunnel vision and only see things from your perspective,” he says. “What does a police officer do when they go up to a car and someone is videotaping them on a cellphone?” The master’s experience, he hopes, will wrangle with such questions and “elevate the professionalism” among the police in the state.

These new degrees address a labor problem, adds David King, dean of graduate studies and research at the State University of New York at Oswego, and director of the Professional Science Master’s Program, which oversees P.S.M. degrees across the SUNY system.

“There are several million job vacancies in the country right now, but they don’t line up with skills,” he says. Each P.S.M. degree, he says, is developed with advisers from the very companies where students may someday work. “We are bringing the curriculum to the market, instead of expecting the market to come to us,” he says.

That’s why John McGloon, who manages the technical writing and “user experience” team at Welch Allyn, the medical device company, helped shape the master’s in human-computer interaction at Oswego. He says employers constantly fear hiring someone who lacks proper skills or doesn’t mesh. Having input may mean better job candidates. This summer, Mr. McGloon has three SUNY Oswego interns. “We plug them right into the team,” he says. “Not only can you gauge their training, you can judge the team fit, which is hard to do in an interview.”

While jobs at Welch Allyn may not require a master's, the degree has been used as a sorting mechanism. After posting an opening for a technical writer, Mr. Mc- Gloon received "dozens and dozens" of résumés. Those in charge of hiring wondered where to start. "I said, 'Half of our applicants have master's. That's our first cut.' "

Laura Georgianna, in charge of employee development at Welch Allyn, confirms that given two otherwise equal résumés, the master's wins. A master's degree "doesn't guarantee that someone will be much more successful," she says. "It says that this person is committed and dedicated to the work and has committed to the deep dive. It gives you further assurance that this is something they have thought about and want."

The exposure to workplaces, and those doing the hiring, makes master's programs appealing to students. "The networking has been unbelievable," says Omar Holguin. His 2009 B.S. in engineering yielded only a job at a concrete mixing company. At the University of Texas, El Paso, which is offering a new master's in construction management, he's interning with a company doing work he's actually interested in, on energy efficiency.

There may be logic in trying to better match higher education to labor needs, but Dr. Vedder is concerned by the shift of graduate work from intellectual pursuit to a skill-based "ticket to a vocation." What's happening to academic reflection? Must knowledge be demonstrable to be valuable?

The questions matter, not just to the world of jobs, but also to the world of ideas. Nancy Sinkoff, chairwoman of the Jewish studies department at Rutgers, says its master's, which starts this fall, will position students for jobs but be about inquiry and deep learning.

"I would imagine in the museum world, I would want to hire someone with content," she says hopefully. "To say, 'I have a master's in Jewish studies,' what better credential to have when you are on the market?"

"This will make you more marketable," she is convinced. "This is how we are selling it."

Whether employers will intuit the value of a master's in Jewish studies is unclear. The history department at the University of South Florida has learned that just because a content-rich syllabus includes applied skills (and internships) doesn't mean students will be hired. "Right now, yes, it's very hard to get a job" with a master's in public history, says Rosalind J. Beiler, chairwoman of the history department, noting that the downturn hurt employers like museums and historical societies.

The university is revamping its master's in public history, a field that interprets academic history for general audiences, to emphasize new-media skills in the hopes of yielding more job placements. "That is precisely the reason we are going in that direction," she says.

"Digital humanities," as this broad movement is called, is leading faculty members to seek fresh ways to make history more accessible and relevant in their teaching and research. A professor of Middle Eastern history, for example, has made podcasts of local Iraqi war veterans in a course on the history of Iraq.

It may be uncomfortable for academia to bend itself to the marketplace, but more institutions are trying.

In what could be a sign of things to come, the German department at the University of Colorado, Boulder, is proposing a Ph.D. aimed at professionals. Candidates, perhaps with an eye toward the European Union, would develop cultural understanding useful in international business and organizations. It would be time-limited to four years — not the current "12-year ticket to oblivion," says John A. Stevenson, dean of the graduate school. And yes, it would include study abroad and internships.

Dr. Stevenson sees a model here that other humanities departments may want to emulate.

It does, however, prompt the question: Will the Ph.D. become the new master's?

R.O.I.

By CECILIA CAPUZZI SIMON

Graduate school has long been a recession hideout, a place to add new skills and credentials that, presumably, increase job opportunities and salary in a market recovered by graduation. A year after 2008's economic meltdown, applications to graduate school rose more than 8 percent. Last year, as the country hobbled toward recovery (or not), 27 percent of college seniors said they planned to attend immediately after graduation, up from 21 percent in 2007, according to the National Association of Colleges and Employers.

Students will invest, typically, two or more years in advanced study and thousands of dollars in tuition and expenses. A little more than half of students working toward a master's will borrow an average $31,000, on top of any undergraduate debt they may already have.

So as a strictly financial calculation, does the investment pay off?

Some academics balk at the return-on-investment question. “Universities don’t sit around and say, ‘We will only have graduate schools in which the starting salary is higher than the tuition,’ ” says Nicholas Lemann, dean of Columbia University’s Graduate School of Journalism. Journalists, like others who are pursuing a passion, he says, “do not think of their lives in pure R.O.I. terms.”

Indeed, when it comes to gauging the value of education, considering only payback is seldom sound, especially for programs steeped in traditions of “knowledge for knowledge’s sake.” But if schools of applied learning aren’t asking the tough questions about the financials of a degree, potential students should, says Anthony P. Carnevale, director of Georgetown University’s Center on Education and the Workforce. “No one’s telling them what it’s worth. Certainly the colleges aren’t.”

Looking at the big picture, the case for grad school seems indisputable: in 2009, the median salary of master’s recipients was nearly 25 percent more than that of colleagues with only a bachelor’s, according to a report released in May by Dr. Carnevale that analyzed never-before-gathered Census Bureau data on compensation by major and degree level.

Dr. Carnevale concludes that grad school is “the best place to ride out a recession” for those who can afford it and are young enough (under 35) to reap the long-term benefit, or who are in fields like health or social work where a master’s or certification is critical to advance. For new college graduates, he says, entering the current job market with a diminished starting salary and job description could compromise a lifelong career and earnings trajectory.

Think of grad school as a 40-year investment, Dr. Carnevale says. Over time, it can move you out of the rank and file into elite positions. The key is determining where the jobs and compensation are. Consider, in your calculation, these variables: institutional quality, tuition costs, debt incurred, and the economic outlook over all and for particular specialties. So-called opportunity costs — lost wages and possible career advancement had you stayed in the job market — also change the cost-benefit picture.

“Field matters,” Dr. Carnevale and others caution. As the Census study shows, in some fields the bump from an advanced degree is minuscule (meteorology), or relatively small because it’s coming off an already low salary (counseling psychology).

But over all, in every major, more education results in more money, and in some (engineering) the increase can be significant.

Engineers are in such demand that those fresh out of undergraduate programs land well-paying positions, and it's a field that values skills learned on the job.

Still, a graduate degree can identify candidates in the workplace for higher-paying management positions or jobs that require specialized knowledge, says Jeff Strohl, an economist who worked on the Georgetown report. In that report, engineers with master's degrees in 2009 earned a median salary of $99,000 — $24,000 more than those with only a bachelor's. With research grants covering tuition for many students, a master's degree in engineering can provide a great return on investment.

That is not usually the case for doctorates, however, unless they move into high-tech fields or supervisory roles. K. Mani Chandy, chairman of the engineering school at the California Institute of Technology, makes clear to Ph.D. candidates at the outset that they will give up significant income and five years of marketplace experience — perhaps the bigger sacrifice, he says, in the fast-changing world of engineering and information technology.

"The R.O.I. for them," he adds, "is intellectual happiness and not money."

Which brings us back to journalism students' labors of love. Hopefuls can spend between $18,680 (in-state for Kansas State University's two-year program) and $50,000 (for Columbia's one-year degree) for a master's that, according to an annual survey by the University of Georgia, adds about $9,000 to starting salary. That's on average $39,000 for those lucky enough to find a job in the worst employment market for journalists in 25 years. (By graduation, 31 percent of Columbia's class of 2011 had full-time job offers; half had lined up paid internships, which Mr. Lemann insists often lead to jobs.)

If a degree in journalism seems risky, the financial benefit of an M.B.A., while taking a hit during the recession, is clear. The average expected starting salary of an M.B.A. in 2011 is $91,000, according to the Graduate Management Admission Council.

The institution attended can influence R.O.I. as well. Using data from GMAC and other sources, two business-school professors set out to calculate the financial impact of an M.B.A. In 2007, the 50 top-ranked M.B.A. schools averaged a 17 percent return on investment — that's starting salary compared to tuition costs, according to the two professors, Brooks C. Holtom at Georgetown and Edward J. Inderrieden at Marquette University.

The top-10 M.B.A. schools, with their higher tuition ($102,000 at Harvard; $108,000 for Wharton), scored a lower R.O.I. of 12 percent. But with corresponding raises and bonuses and institutional cache, the net value of the investment in an M.B.A. from an elite institution is greater over time, according to Dr. Holtom and Dr. Inderrieden.

Business is on Dr. Carnevale's "you're-crazy-if-you-don't" list, along with life sciences, physical sciences and social work.

The master's in social work has become "absolutely essential" to advance in the profession, says Jacqueline B. Mondros, dean of Hunter College's School of Social Work, of the City University of New York. Ninety percent of the members of the National Association of Social Workers, the field's largest professional organization, have an M.S.W. But the return on investment won't tempt. For social workers with the advanced degree, the median salary in 2009 was $55,000, according to the group's research. Social workers with a B.A. earned $15,000 less, while Ph.D.'s added $17,000 to their median pay.

And the investment? Students seeking an M.S.W. borrow an average $35,500 for a degree that can cost $34,000 at Hunter or $80,000 at Columbia. That's more than their M.B.A. counterparts, who borrow on average $32,000, and more of them borrow (three-quarters of all M.S.W. candidates; half of M.B.A. students).

The rule of thumb for borrowing, says Mark Kantrowitz, publisher of finaid.org, is that debt should never exceed starting salary. Ideally, he adds, it should be half that.

"I'd be the last person to say not to pursue a dream," Mr. Kantrowitz says. "But do it with your eyes open."

It's easy to see how students can get into financial trouble, and how the economics of postsecondary school can affect choices, and so the professions themselves.

That's what's happening in veterinary medicine. Vet students pay tuition comparable to medical students. They also take on comparable debt. At Cornell University's highly regarded program, tuition in 2010 totaled $85,200 ($128,250 for nonresidents), and students incurred a mean debt of $92,700. Last year, half of Cornell graduates went on to jobs with an average starting salary of $75,000. Counting the half that went on to low-paying internships brings the average to $68,000.

The field, dominated by small businesses, was hit hard in the recession as practices cut back on staff vets. To pay off debt, most graduates are choosing more lucrative urban "companion animal" practices over rural, large-animal practices. This has caused a shortage that will worsen as practitioners retire, and applications have stagnated.

"The debt-to-salary ratio is something we worry about," says Michael I. Kotlikoff, dean of the Cornell veterinary medicine program. "It's not like philosophy or literature," fields notorious for turning out unemployable Ph.D.'s. "But at some point you start to wonder whether that investment is financially sound."

Meanwhile, many law school graduates are taking what work they can get. Last year, while law schools continued to overpopulate the market with J.D.'s (43,000 in 2009, or 11 percent more than a decade ago), 17,000 jobs were cut from the field, and there were 33 percent fewer summer associate offers.

Those who graduate from the top schools have the best opportunities for the high-paying jobs out there. But many newly minted lawyers are picking up hourly work, or taking staff jobs that typically pay $65,000 a year.

That happens to be the "break-even salary" that makes the investment in law school worthwhile, according to research from Northwestern University School of Law. (Many believe that figure to be low.)

A law degree can run $100,000 at low-tier schools, and upward of $140,000 at top ones. According to the National Postsecondary Student Aid Study, 89 percent of law students borrow an average $80,000. You don't need a master's degree in finance to see what kind of investment that might turn out to be.

The Essential T.A.

By ANN CARRNS

Jason G. Ball was thrilled when he was accepted two years ago at the University of California, Los Angeles, and could pursue a Ph.D. in political science. He was so thrilled, he enrolled without any assurance of a teaching assistantship or other financial support.

Instead, he has had to compete for available assistantships, succeeding in getting one for just one academic quarter last year. Typically, students like Mr. Ball could expect to get a position

fairly easily. “Now that’s not necessarily the case,” says Jeffrey Lewis, the new chairman of the department. With money tight, the program has admitted fewer Ph.D. candidates in the past two years, and while it has managed to fully finance nearly all of them, the few who have come without a guarantee have found teaching assistantships harder to come by.

Mr. Ball, 27, fretted all spring about how he would pay for his third year of studies. A son, grandson and great-grandson of oil workers, he labored summers as a roustabout at the Port of Long Beach and attended community college before earning his bachelor’s degree. For the coming year, he had resigned himself to taking on about $28,000 in debt to cover tuition and expenses after he was turned down for a teaching assistantship.

Then, just as he was losing hope, he was notified that he had been awarded a spot helping teach a freshman class on “Work, Labor and Social Justice in the U.S.,” his area of interest.

“I’m ecstatic and relieved,” he says.

This fall, to accommodate an unexpectedly large incoming class, U.C.L.A. is expanding its lower-level courses, where T.A.’s are needed most.

The past two years have been particularly anxious ones for many graduate students. A quarter of all doctoral students and 5 percent of all master’s students receive a teaching assistantship, according to an analysis of the latest federal statistics by Mark Kantrowitz, publisher of the college financing Web site finaid.org. About the same proportion receive a research assistantship. The numbers have remained relatively steady, but that data is from 2007-8 — before the economic crisis.

“We are seeing colleges have to contract the amount of aid, in any form, they give to students, as their budgets are being crunched,” says Rosemary G. Feal, executive director of the Modern Language Association. This is especially the case in English, foreign language and history, she says, where students rely most heavily on teaching assistantships to finance their studies. Science and engineering students are less affected because they often get research assistantships that are externally financed.

To have to scramble for money while trying to do research is burdensome. To recruit top students, selective programs prefer to admit only as many applicants as they can fully support, with fellowships, tuition waivers and assistantships. So bowing to budget realities, some programs have been shrinking. While the situation varies campus to campus, and even program

to program within a campus, “cutbacks and hardships are continuing everywhere, from what I can tell,” Ms. Feal says.

Columbia University’s Graduate School of Arts and Sciences reduced its admission of Ph.D. candidates by about 10 percent in 2009 — in response to the economy as well as a lackluster academic job market for graduates — and the numbers aren’t likely to rebound in the foreseeable future, says Carlos J. Alonso, the school’s dean. The school is instead offering more support to the Ph.D.’s it does admit. “Our calculation is that it is better for everyone to have fewer students,” he says, “but much better-funded students.”

Many big public universities that have maintained their graduate admissions levels are struggling to meet the goal of offering full financing, Ms. Feal says. The schools are providing financial support to even fewer master’s degree students, and may assure some doctoral students just one year as a T.A. instead of the usual two, or offer partial instead of full-tuition waivers.

With faculty positions going unfilled, many universities have opted to hire more adjunct professors, who don’t require costly tuition waivers. “What I’ve seen many departments do is beef up adjuncts, as opposed to T.A.’s,” says James C. Wimbush, dean of the graduate school at Indiana University Bloomington and a board member of the Council of Graduate Schools.

At U.C.L.A., because of California’s budget crisis, the number of T.A.’s in the College of Letters and Science dropped by about 2 percent in 2009-10, to 1,595, says Judith L. Smith, dean and vice provost for undergraduate education at the college.

For this fall, however, U.C.L.A. is making big adjustments. With 1,200 more freshmen than anticipated, an increase of 26 percent, lecture courses must be expanded and staff members brought in. An additional $10 million is being earmarked for lecturers and visiting faculty members, and $6 million for T.A.’s — enough for roughly 400 new half-time assistantships campuswide, in courses critical to entering students like composition, math and foreign language.

Some grad students are skeptical that the extra positions will make their jobs easier. Elise Youn, 34, who just completed her third year of a Ph.D. in urban planning at U.C.L.A., has been a T.A. for two years, for an urbanization class with 60 students (about double the size of previous years, she says). Ms. Youn attends the main lecture, holds office hours, answers e-mails from students, and reads all papers and exams, commenting on them and recommending a grade. She’s to work 10 hours a week, which rarely happens.

T.A.'s, she says, "work harder for the same pay as in the past." (Nationally, T.A.'s are paid on average $12,000, and research assistants $14,000 — before taxes. Unlike fellowships or scholarships, these stipends are given in exchange for work.)

T.A.'s at U.C.L.A. are unionized, and there's a formal grievance process in place if they feel overworked. But Ms. Youn says students are often reluctant to complain, for fear of jeopardizing recommendations for future grants or jobs. Still, many T.A.'s report finding the experience rewarding. Ms. Youn says she has a good relationship with her professor and believes the assistantship will set her apart in a competitive academic marketplace when she completes her degree.

T.A.'s are crucial to the mission of research universities. They provide energetic, relatively inexpensive labor, but their true value lies in their scholarship because they ultimately are the next generation of faculty members. "The system needs them to function effectively," says Debra W. Stewart, president of the Council of Graduate Schools.

Lisa Neher's voice rises with enthusiasm as she reflects on her T.A. experience at the University of Kansas. "It was exciting," she says. "But I felt the burden of doing a good job for these students. I felt how much of a responsibility it was."

Ms. Neher, 25, received full financing for her two-year master's degree in music composition, scoring an assistantship for the second year that came with a tuition waiver (value: about $15,000) and a stipend of $900 a month — enough to scrape by, if she rode her bike around Lawrence instead of buying a car. Her day began with a 6 a.m. ride to campus and didn't end until she fell into bed at midnight.

She worked about 20 hours a week as a T.A., teaching a section of a music theory class that had 18 undergraduates. Although she met weekly with a professor and other T.A.'s to coordinate what would be taught, she was the sole instructor for her section.

She felt a close bond with her students. She always hurried to respond to their e-mails, and to answer questions when they stopped by the tiny office she shared with five other T.A.'s and a piano, before turning to her own thesis: a 22-minute "chamber opera" to be performed by two singers. Her composition, "White Horizon," follows the story of a real-life expedition to the North Pole gone wrong.

Ms. Neher dreams of the opera. She was accepted into that program for the fall, for a second master's. But she has decided not to attend, for now: she wasn't offered a T.A. spot.

Getting on the T.A. Track

A teaching assistantship is, at heart, merit-based financial aid, and an apprenticeship in instruction for the ivory-tower bound. They are awarded, like admission to a program itself, based on academic promise.

NUTS AND BOLTS At most grad schools, an application to be a T.A. is submitted with the application to the school and the financial aid form. Schools avoid assigning first-year students to be T.A.'s, preferring they focus on their own studies. They may be invited to work with a professor the second year, based on academic performance the first, or can compete for spots as they become available (sometimes, students with guaranteed spots obtain outside research grants that allow them to skip teaching, creating openings).

WHAT MATTERS Departments use assistantships as recruiting tools, so the best candidates are the ones with the most impressive application. "If you're really competitive, they're going to be throwing assistantships at you," says Peter Diffley, dean of graduate studies at the University of Hartford and co-author of "Paying for Graduate School Without Going Broke."

Teaching experience doesn't necessarily help, he says. While students seeking academic careers are attractive — indicate that interest on the application — graduate admissions panels are mainly "looking at your ability to produce a piece of creative work: a dissertation or a thesis."

William G. Roy, former chairman of the sociology department at U.C.L.A., says the writing sample submitted with an application is especially important. It should be an academic paper, he says, from a course related to the one you're interested in teaching. Faculty members are looking at analytic clarity, rather than "grace or style," he said. T.A.'s must be able to explain ideas clearly and frame interesting questions.

NETWORKING If a faculty member specializes in an area of interest, write a personal note about assisting him or her as a T.A., says Dr. Diffley, or introduce yourself personally. A personal statement, he says, should be specific but not so specific you cut yourself out of the running if there's no professor pursuing that line of inquiry. Saying you like biology is too broad; saying you're interested in the host-parasite relationship may be too narrow.